



State of Utah

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08/17/2010

Department of  
Environmental Quality

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DIVISION OF ENVIRONMENTAL  
RESPONSE AND REMEDIATION

Brent H. Everett  
Director

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ERRC-165-10

August 17, 2010

David Wilson, P.E., P.G.  
Environmental Resources Management (ERM)  
102 West 500 South, Suite 650  
Salt Lake City, Utah 84101

**RE: Comments for the Site Redevelopment Work Plan**

Dear Mr. Wilson,

This letter is being sent to provide comments on the *Site Redevelopment Work Plan Salt Lake Mixed Use Hotel Project (Work Plan)* dated June 2010. After reviewing the *Work Plan*, the Utah Department of Environmental Quality (UDEQ) and the U.S. Environmental Protection Agency, Region 8 (EPA) have determined that the *Work Plan* needs more details for specific procedures including but not limited to decontamination; dust control; air monitoring; waste storage; transportation; and, disposal. Final approval for the project will not be given until specific procedures are provided in writing to the UDEQ and EPA. These procedures may be provided in the revised *Work Plan* or after contractors have been selected for the project.

The *Work Plan* must demonstrate that the project managers understand that this site is fully regulated under the asbestos regulations and that the contamination at the site is regulated as a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substance and has been the subject of a Superfund removal action. Special attention must be given to planning how emissions will be contained and/or prevented and described in detail within the revised *Work Plan*.

The comments to the *Work Plan* are as follows:

Section 2.2 Restrictions on Site Modifications;

- Under Part 5(b) of the Environmental Covenant, it addresses the need for workers to be certified asbestos workers in the State of Utah. Refer to UAC R307-801-6. This certification requirement needs to be stated in the *Work Plan*.

Section 2.7 Landscaping;

- Areas within the site boundary proposed for vegetative cover will be covered with, at minimum, 2 feet of clean, imported fill material.

Section 2.9 Site Permits;

- Needs to indicate that a NESHAP Demolition Notification form is required to be submitted to the Utah Division of Air Quality.

Section 3.1 Earthwork;

- The asphalt cap cannot be disturbed until measures are in place to prevent the release of asbestos and workers are protected. From the very beginning of the work, the work area must be divided into an exclusion zone, contamination reduction zone (decontamination zone), and a support zone. These areas must be clearly delineated and explained in detail to workers on-site. These zones can be moved and managed under the proposed phased soil removal approach.
- On the Pacificorp property, asbestos-contaminated soils were found at depths greater than 15 feet. The *Work Plan* should include recognition that soils at the site may be contaminated at depths greater than 15 feet and have procedures for properly addressing that.
- The *Work Plan* should address procedures for clearance sampling of subsurface soils. Otherwise, all soils at the site must be treated and handled as asbestos contaminated.
- The *Work Plan* should clarify that all "asbestos-containing soils" are defined as any soils containing any quantity of Libby amphibole asbestos and are not limited to the NESHAP definition of asbestos containing material (ACM) of one percent or greater asbestos content.

Section 3.2 Dust Suppression and Air Quality Protection;

- Fails to set a no visible emissions standard when working with asbestos contaminated soil.
- There is no acceptable level of asbestos emissions for Libby amphibole-asbestos to receptors outside the exclusion zone.
- The contractor responsible for the air monitoring at the site needs to be a separate company from the contractor doing the actual work to avoid conflict of interest.
- Any areas to be disturbed must be thoroughly wetted with water prior to disturbance. There must be sufficient water on-site to conduct this activity, such as a fire hydrant or a water truck. There should be sufficient water pressure, volume, and appropriate water hoses or sprayers to immediately knock down any inadvertently released dusts. The water hoses must be manned by personnel at all times that the cap or contaminated soil is being disturbed. The report seems to suggest that some compaction work at the site will be conducted without using any water to wet contaminated soils; more discussion of this work is needed in the *Work Plan* and

how dust will be immediately contained if the compaction does generate dust from asbestos-contaminated soils.

- Any contaminated stockpiled soils must be adequately wetted and covered at all times except when actively used. These soils may only be stockpiled inside an exclusion zone. Consideration should be given toward using lined and covered containers for contaminated soils instead of stockpiles within berms. The *Work Plan* should clarify that all asbestos-contaminated soils will be disposed as ACM and not only those with one percent or greater asbestos content.

#### Section 3.5 Storm Water Management and Erosion Control;

- UAC R307-801-14(1)(f) requires asbestos waste water to be filtered to 5 microns.

#### Section 3.6 Management of Contaminated Soils;

- Does not address contamination of trucks hauling asbestos-contaminated soils to an asbestos landfill. A plan must be developed for transportation and disposal of contaminated soils including but not limited to how haul trucks or rollovers will be lined in advance. Standard practice for handling bulk asbestos waste is to line the truck bed with 6 mil polyethylene sheeting and then wrap, glue, and tape top seam to cover the top of the load. Decontaminate trucks before leaving the site.
- Any contaminated stockpiled soils must be adequately wetted and covered at all times except when actively used. These soils may only be stockpiled inside an exclusion zone. Consideration should be given toward using lined and covered containers for contaminated soils instead of stockpiles within berms. The *Work Plan* should clarify that all asbestos-contaminated soils will be disposed as ACM and not only those with one percent or greater asbestos content.

#### Section 3.7 Equipment and Personnel Decontamination;

- UAC R307-801-14(1)(f) requires asbestos waste water to be filtered to 5 microns. A worker decontamination unit is required. Workers exposed to asbestos-contaminated soils should exit the site through the decontamination unit.
- Further information is needed addressing the establishment of exclusion zones, contamination reduction zones (decontamination zones), and support zones within the site boundaries and how these areas will be managed under the proposed phased soil removal approach. As stated above, the Utah Division of Air Quality rules require that a decontamination unit be located on-site. Workers leaving the exclusion zone will need to exit through the decontamination unit. Workers entering the exclusion zone must wear personal protective equipment (PPE), including respirator, outer clothing such as a hooded Tyvek suit, shoe coverings and gloves. PPE should not be re-used, except for respirators. A special item such as leather gloves could be reused if it was always kept in the exclusion zone and disposed when no longer needed.

Vehicles and equipment leaving the exclusion zone are subject to the same procedures as individual workers. Workers inside the enclosed cabs of vehicles are subject to the same PPE

requirements as all other workers working inside the exclusion zone. Enclosed cabs do not prevent the migration of asbestos fibers since the fibers can enter through the vehicle's ventilation system, even if the ventilation system is not running. A plan needs to be in place to thoroughly decontaminate all vehicles and equipment leaving the exclusion zone and how the water from that decontamination will be contained and then either placed back into the excavation or containerized for later disposal.

#### Section 3.9 Site Security and Access;

- This section should address posting warning signs around the perimeter warning the general public of the asbestos hazards within the work area.

#### Section 4.1 Asbestos Air Quality and Personnel Monitoring;

- There is no acceptable level of asbestos emissions for Libby amphibole asbestos to receptors outside the exclusion zone.
- The contractor responsible for the air monitoring at the site needs to be a separate company from the contractor doing the actual work to avoid conflict of interest.
- More information must be provided on the air monitoring devices to be used on personnel and perimeter fence, and the proposed laboratory analyses, turnaround times, and detection levels.
- The filters from the perimeter air monitors must be transported to a laboratory daily, either by hand or express mail. The laboratory must provide analytical results within a 24 hour turnaround time. Any detection of any Libby amphibole asbestos fibers demonstrates that the engineering controls at the site are not working and must be immediately improved or modified. Daily air monitoring must continue throughout the project, unless there is no disturbance of contaminated soils and any exposed soils have been covered.
- Laboratory analyses must be provided to the UDEQ upon receipt, and to the EPA upon request, within 24 hours of receipt from the laboratory.

#### Section 4.3 Demarcation Layer Installation;

- "In areas where cleanup work has already been performed, these barriers and caps already exist." The EPA is not aware of any barriers in place on the property that distinguish between clean and contaminated soils. There is orange plastic netting on the Pacificorp property but it does not distinguish between clean and contaminated soils.

#### Section 4.4 Visual Inspection;

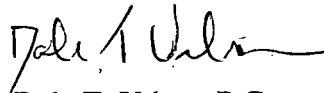
- Individuals conducting visual inspections for asbestos must be certified as a Utah Asbestos Inspector. A certified Utah Asbestos Contractor/Supervisor must direct site asbestos activities.

Section 4.6 Agency Reporting Requirements;

- Individuals documenting asbestos activities must be certified as a Utah Asbestos Inspector or certified Utah Asbestos Contractor/Supervisor must direct site asbestos activities, as appropriate.
- Copies of daily reports must be provided to the UDEQ, and to the EPA within 24 hours of request.
- Laboratory analyses must be provided to the UDEQ upon receipt from the laboratory, and to the EPA within 24 upon request.
- A copy of all reports generated or modifications to any reports regarding the site activities need to be provided to the UDEQ and EPA within 24-hours.
- Representatives from the UDEQ and EPA may conduct site visits during some or all of the intrusive work at the site. The UDEQ and EPA retain their authorities to address any releases of asbestos at the site, including stopping work if necessary.

It is understood that some of these specific procedures identified in these comments may be best addressed by the selected contractors. For example, the certified asbestos removal contractor may best provide specifics regarding the set-up of the vehicle decontamination areas or the selected approved landfill facility for disposal of wastes from the site. The selected air monitoring contractor may be best to provide the specifics regarding the types of monitoring equipment used for the perimeter air sampling and personnel monitoring and the selected laboratory. However, these issues still need to be addressed within the *Work Plan*. Changes or addendums to this *Work Plan* by the selected contractors will need to be submitted in writing to the UDEQ and the EPA. If specific details regarding the removal activities are left to the selected contractors, then it may be best if all involved parties participate in a meeting to discuss both agency and client expectations. If you have any further questions regarding the comments to the *Site Redevelopment Work Plan Salt Lake Mixed Use Hotel Project* please contact Craig Bamitz at (801) 536-0071.

Sincerely,



Dale T. Urban, P.G.

Site Assessment Section Manager

Division of Environmental Response and Remediation

DTU/CRB/eds

cc: Joyce Ackerman, U.S. Environmental Protection Agency, Region 8  
Greg Sorenson, Utah Department of Environmental Quality, Division of Air Quality  
Vicki Bennett, Director, Salt Lake City, Division of Sustainability and Environment  
Royal DeLegge, Director, Salt Lake Valley Health Department, Environmental Health